WHAT IS CLAIMED IS:

1. A method for identifying a cancer-target gene, comprising:

a) identifying a gene that is at least 5 fold over-expressed in a cancer cell line and that maps to a chromosomal region with a CGH ratio of at least 1.25;

b) determining an RNA expression level of said gene of at least 1.5 fold in a tumor tissue compared to corresponding normal tissue in a genetic database, and

c) determining that said gene encodes a protein domain that is modulated by chemical compounds,

wherein a gene that meets the criteria of steps a, b and c is considered to be a cancer-target gene,

thereby identifying a cancer-target gene.

2. A set of cancer-target genes identified by the method of claim 1.

3. A method for identifying an agent that modulates the activity of a cancer-target gene comprising:

(a) contacting a test compound with a cell that expresses a polynucleotide that corresponds to a gene that has the properties of a, b and c of claim 1 and under conditions supporting said expression; and

(b) determining a difference in expression of said gene relative to when said test compound is not present wherein said difference indicates gene modulating activity,

thereby identifying said test compound as an agent that modulates the activity of said cancer-related gene.

4. The method of claim 3 wherein said gene was first identified as a cancer target gene using the method of claim 1 or 2.

5. The method of claim 4 wherein said gene is a gene selected from the group consisting of KIAA1274, NEK6, PAK2, PAK4, STK38L, ACP1, *ARHC*, *CDC6*, *CDK7*, CDKN3, *CRK7*, DUSP16, *FIGNL1*, GUK1, *ITPR2*, KCNK1, KCNK5, *PRO2000*, RFC2 and RIPK2.

6. The method of claim 3 wherein said expression is transcription to form RNA.

7. The method of claim 3 wherein said expression is translation to form protein.

8. The method of claim 4 wherein the cell is a cancer cell and the determined difference in expression is a decrease in expression.

9. The method of claim 4 wherein the cell is a recombinant cell and the difference in expression is a decrease in expression.

10. A method for identifying an anti-neoplastic agent comprising contacting a cell exhibiting neoplastic activity with a compound first identified as a cancer target gene modulator using the method of claim 3 and detecting a decrease in said neoplastic activity after said contacting compared to when said contacting does not occur.

11. The process of claim 10 wherein said neoplastic activity is accelerated cellular replication.

12. The process of claim 10 wherein said decrease in neoplastic activity results from the death of the cell.

13. A method for identifying an anti-neoplastic agent comprising contacting a cell exhibiting neoplastic activity with a compound that modulates expression of at least one of genes 1 to 20 of Table 6 and detecting a

decrease in said neoplastic activity after said contacting compared to when said contacting does not occur.

14. The process of claim 13 wherein said neoplastic activity is accelerated cellular replication.

15. The process of claim 13 wherein said decrease in neoplastic activity results from the death of the cell.

16. A method for identifying an anti-neoplastic agent comprising administering to an animal exhibiting a cancerous condition an effective amount of an agent that modulates expression of at least one of genes 1 to 20 of Table 6 and detecting a decrease in said cancerous condition.

17. A method for identifying an anti-neoplastic agent comprising administering to an animal exhibiting a cancerous condition an effective amount of a cancer target gene modulating agent by the method of claim 3 and detecting a decrease in said cancerous condition.

18. A method for determining the cancerous status of a cell, comprising determining an increase in the level of expression in said cell of at least one gene that meets the criteria of a, b and c of claim 1.

19. The method of claim 14 wherein said gene is a gene selected from the group consisting of KIAA1274, NEK6, PAK2, PAK4, STK38L, ACP1, *ARHC*, *CDC6*, *CDK7*, CDKN3, *CRK7*, DUSP16, *FIGNL1*, GUK1, *ITPR2*, KCNK1, KCNK5, *PRO2000*, RFC2 and RIPK2.

20. A method for identifying an agent that modulates the activity of a cancer-target polypeptide comprising:

(a) contacting a test compound with a cell expressing a polypeptide encoded by a polynucleotide corresponding to a gene having the properties of

a, b and c of claim 1 and under conditions promoting the expression of said polypeptide; and

(b) determining a difference in expression of said polypeptide relative to when said test compound is not present wherein said difference indicates cancer-target polypeptide modulating activity,

thereby identifying a cancer-target polypeptide modulating agent.

21. The method of claim 20 wherein said polypeptide is encoded by a gene selected from the group consisting of KIAA1274, NEK6, PAK2, PAK4, STK38L, ACP1, *ARHC*, *CDC6*, *CDK7*, CDKN3, *CRK7*, DUSP16, *FIGNL1*, GUK1, *ITPR2*, KCNK1, KCNK5, *PRO2000*, RFC2 and RIPK2.

22. A method for identifying an agent that modulates the activity of a cancer-target polypeptide comprising:

(a) contacting a test compound with a polypeptide encoded by a polynucleotide corresponding to a gene having the properties of a, b and c of claim 1 and under conditions promoting the activity of said polypeptide; and

(b) determining a difference in activity of said polypeptide relative to when said test compound is not present wherein said difference indicates cancer-target polypeptide modulating activity,

thereby identifying a cancer-target polypeptide modulating agent.

23. The method of claim 22 wherein said polypeptide is encoded by a gene selected from the group consisting of KIAA1274, NEK6, PAK2, PAK4, STK38L, ACP1, *ARHC*, *CDC6*, *CDK7*, CDKN3, *CRK7*, DUSP16, *FIGNL1*, GUK1, *ITPR2*, KCNK1, KCNK5, *PRO2000*, RFC2 and RIPK2.

24. An antibody that binds to a polypeptide encoded by a gene having the properties of a, b and c of claim 1.

25. The antibody of claim 24 wherein said gene is a gene selected from the group consisting of KIAA1274, NEK6, PAK2, PAK4, STK38L, ACP1,

ARHC, *CDC6*, *CDK7*, CDKN3, *CRK7*, DUSP16, *FIGNL1*, GUK1, *ITPR2*, KCNK1, KCNK5, *PRO2000*, RFC2 and RIPK2.

26. The antibody of claim 24 wherein said antibody is a monoclonal antibody.

27. The antibody of claim 24 wherein said antibody is a recombinant antibody.

28. The antibody of claim 24 wherein said antibody is a synthetic antibody.

29. The antibody of claim 24 wherein said antibody further comprises a cytotoxic agent.

30. The antibody of claim 29 wherein said cytotoxic agent is an apoptotic agent.

31. A method for treating cancer comprising contacting a cancerous cell with an effective amount of an agent that can reduce the activity of a gene having the properties of a, b and c of claim 1.

32. The method of claim 31 wherein said agent having activity in the method of claim 3.

33. The method of claim 31 wherein said agent was first identified as having such activity using the method of claim 3.

34. The method of claim 31 wherein said agent having activity in the method of claim 16.

35. The method of claim 31 wherein said agent was first identified as having such activity using the method of claim 16.

36. The method of claim 31 wherein said agent having activity in the method of claim 22.

37. The method of claim 31 wherein said agent was first identified as having such activity using the method of claim 22.

38. The method of claim 31 wherein said gene is a gene selected from the group consisting of KIAA1274, NEK6, PAK2, PAK4, STK38L, ACP1, *ARHC*, *CDC6*, *CDK7*, CDKN3, *CRK7*, DUSP16, *FIGNL1*, GUK1, *ITPR2*, KCNK1, KCNK5, *PRO2000*, RFC2 and RIPK2.

39. The method of claim 31 wherein said cancerous cell is contacted *in vivo*.

40. The method of claim 31 wherein said agent has affinity for an expression product of said gene.

41. The method of claim 40 wherein said agent is an antibody of claim 24 – 30.

42. A cancer target gene wherein said gene is a gene identified in Table 6.

43. A method for producing test data with respect to the gene modulating activity of a compound comprising:

(a) contacting a compound with a cell containing a polynucleotide comprising a nucleotide sequence corresponding to a gene whose expression is increased in a cancerous cell over that in a non-cancerous cell and under conditions wherein said polynucleotide is being expressed,

(b) determining a change in expression of polynucleotides as a result of said contacting, and

(c) producing test data with respect to the gene modulating activity of said compound based on a decrease in the expression of the determined gene whose expression is otherwise increased in a cancerous cell over that in a non-cancerous cell indicating gene modulating activity.

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